

CLAIMS

1. A composition comprising at least 55% w/w (based on the NaCl free, dry matter weight) of 5'-ribonucleotides and which further comprises glutamate.
2. A composition according to claim 1, wherein the composition comprises at least 65% or at least 75% w/w (based on the NaCl free, dry matter weight) of 5'-ribonucleotides.
3. A composition according to claim 1 or 2, wherein the ratio of glutamate to 5'-ribonucleotides is less than 0.1, preferably less than 0.05 or more preferably less than 0.01 and wherein this ratio is more than 0.001.
4. A composition according to any one of claims 1 to 3, wherein the composition comprises 0.01 to 10% w/w (based on the NaCl dry matter weight) of glutamate.
5. A composition according to anyone of claims 1 to 4, wherein the composition comprises more 5'-GMP than the sum of 5'-IMP and 5'-AMP.
6. A process to produce a composition containing 5'-ribonucleotides which comprises:
 - (i) treating microbial cells to release the cell contents comprising RNA;
 - (ii) separating the RNA present in the released cell contents from other soluble cell material; and
 - (iii) converting the separated RNA into 5'-ribonucleotides.
7. A process according to claim 6, wherein the native enzymes of the microbial cells are inactivated prior to treating the microbial cells to release the cell contents.
8. A process according to claim 6 or 7, wherein the cells are treated enzymatically, chemically or mechanically.
9. A process according to claim 8, wherein the cells are treated enzymatically, preferably the enzyme used to treat the cells is protease.
10. A process according to any one of claims 6 to 9, wherein solid material originating from the microbial cells is removed prior to separating the RNA present in the released cell content from other soluble cell material.
11. A process according to claim 10, wherein the solid material is removed by centrifugation or filtration.

12. A process according to any one of claims 6 to 11, wherein the separation of the RNA from the other soluble cell material is carried out by ultrafiltration.
13. A process according to any one of claims 6 to 12, wherein the separated RNA is enzymatically converted into 5'-ribonucleotides, preferably by 5'-Fdase or by 5'-Fdase and deaminase.
- 5 14. A process according to any one of claims 6 to 13, wherein the 5'-ribonucleotides are further purified by the removal of compounds having a higher molecular weight than the 5'-ribonucleotides.
- 10 15. A process according to claim 14, wherein the removal of compounds having a higher molecular weight than the 5'-ribonucleotides is carried out by ultrafiltration.
16. Use of the composition according to any one of claims 1 to 5 or a composition containing 5'-ribonucleotides produced by a process according to any one of the claims 6 to 15 in food or feed.
- 15 17. Use of the composition according to any one of claims 1 to 5 or a composition containing 5'-ribonucleotides produced by a process according to any one of the claims 6 to 15 to improve the fat note in the taste and/or in the aroma and/or in the mouthfeel of a food with a reduced or low total fat.
- 20 18. Use of the composition according to any one of claims 1 to 5 or a composition containing 5'-ribonucleotides produced by a process according to any one of the claims 6 to 15 to mask the aftertaste of an artificial sweetener in food.
19. Use of the composition according to any one of claims 1 to 5 or a composition containing 5'-ribonucleotides produced by a process according to any one of the claims 6 to 15 to improve the specific vegetable note and/or fruity note and/or alcoholic note in the taste and/or aroma and/or mouthfeel of a beverage.